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Exchange formats for the audit data collection standard: XML and JSON

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 295, *Audit data services*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

Accounting and enterprise resource planning (ERP) software packages are widely used in businesses and by various government organizations to manage and track business processes, post transactions and produce financial reports. Because of the nature of the information contained within the ERP systems, the data are also leveraged by internal and external auditors to assess the business controls, processes and financial reporting. There are numerous ERP packages that are used by businesses and government organizations, which can vary greatly in design (e.g. interfaces, data content, data formats, operational reports, management reports, financial reports). These and other design differences present challenges in the collection of data for auditing supervision management purposes.

This document concerns the specification of technical exchange formats as output file formats for the functional content defined in ISO 21378.

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Exchange formats for the audit data collection standard: XML and JSON

1 Scope

ISO 21378, the audit data collection standard (ADCS), defines the functional requirements for exchanging audit data in flat file format. This document concerns the specification of technical exchange formats in extensible markup language (XML), JavaScript object notation (JSON) and comma-separated values (CSV) as output file formats for the functional content defined in ISO 21378.

This document also contains the following schemas and sample files for tables in ISO 21378.

— XML schema;

— XML sample file;

— JSON schema;

— JSON sample file.

To keep the three exchange formats (XML, JSON and CSV) consistent, this document also specifies how to use the technical solution in the CSV format.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 21378:2019, *Audit data collection*

ISO 8601-1, *Date and time — Representations for information interchange — Part 1: Basic rules*

ISO/IEC 21778, *Information technology — The JSON data interchange syntax*

W3C *Extensible Markup Language (XML) 1.0 (Fifth Edition).* Available at https://www.w3.org/TR/2008/REC-xml-20081126/

W3C *XML Schema Part 1: Structures Second Edition*. Available at https://www.w3.org/TR/2004/REC-xmlschema-1-20041028/

W3C *XML Schema Definition Language (XSD) 1.1 Part 2: Datatypes*. Available at https://www.w3.org/TR/2012/REC-xmlschema11-2-20120405/

JSON Schema: A Media Type for Describing JSON Documents. Available at https://json-schema.org/draft/2020-12/json-schema-core.html

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

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